

# State Intellectual Property Office of People's Republic of China

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Applicant(s)	<b>SAMSUNG ELECTRONICS CO., LTD.</b>	Issuing Date: <b>September 24, 2004</b>
Patent Agent(s)	<b>Zhimin RONG</b>	
Application No.	<b>03124034.8</b>	
Title of Invention	<b>A Monitor Improved In A Tilting Structure</b>	

## THE FIRST OFFICE ACTION

1. ☒ The applicant filed a request for substantive examination on \_\_\_\_\_ (day/month/year). The examiner has carried out substantive examination on the above mentioned application for an invention patent in accordance with the provisions of Article 35(1) of the Chinese Patent Law.
- ☐ The Patent Office has decided to carry out substantive examination on the above mentioned application for an invention patent in accordance with the provisions of Article 35(2) of the Chinese Patent Law.
2. ☒ The applicant claimed:
- the filing date 2002.7.16 in the Korea Patent Office as the priority date,  
the filing date \_\_\_\_\_ in the \_\_\_\_\_ Patent Office as the priority date,  
the filing date \_\_\_\_\_ in the \_\_\_\_\_ Patent Office as the priority date,  
the filing date \_\_\_\_\_ in the \_\_\_\_\_ Patent Office as the priority date,  
the filing date \_\_\_\_\_ in the \_\_\_\_\_ Patent Office as the priority date.
- ☒ The applicant has provided a copy of the priority documents certified by the Patent Office where the prior application(s) was/were filed.
- ☐ The applicant has not provided a copy of the priority documents certified by the Patent Office where the prior application(s) was/were filed and the priority claim(s) is/are deemed not to have been made in accordance with the provisions of Article 30 of the Chinese Patent Law.
3. ☐ The applicant submitted amendment (s) to the application on \_\_\_\_\_ and on \_\_\_\_\_, wherein, the amendment(s) submitted on \_\_\_\_\_ and \_\_\_\_\_ on \_\_\_\_\_ are unacceptable, because said amendment(s) is/are not in conformity with
- ☐ the provisions of Article 33 of the Chinese Patent Law:  
☐ the provisions of Rule 51 of the Implementing Regulations of the Chinese Patent Law.
- The detailed reasons for the amendments being unacceptable are described in the text of this Office Action.
4. ☒ The examination was carried out based on the application documents originally filed.  
☐ The examination was carried out based on the application documents indicated below:
- ☐ Description:
- Pages \_\_\_\_\_ of original application documents filed on the application date,  
Pages \_\_\_\_\_ filed on; Pages \_\_\_\_\_ filed on;  
Pages \_\_\_\_\_ filed on; Pages \_\_\_\_\_ filed on;

☐ Claims:

Pages \_\_\_\_\_ of original application documents filed on the application date,

Pages \_\_\_\_\_ filed on; Pages \_\_\_\_\_ filed on;

Pages \_\_\_\_\_ filed on; Pages \_\_\_\_\_ filed on;

☐ Drawings:

Pages \_\_\_\_\_ of original application documents filed on the application date,

Pages \_\_\_\_\_ filed on; Pages \_\_\_\_\_ filed on;

Pages \_\_\_\_\_ filed on; Pages \_\_\_\_\_ filed on;

☐ Abstract: ☐ Filed on the application date; ☐ filed on \_\_\_\_\_

☐ Drawing selected for publication on the front page of the application: ☐ Filed on the application date; ☐ filed on \_\_\_\_\_

5. ☐ This Notification is issued without a search having been conducted.

☒ This Notification is issued with a search having been conducted.

☒ The following reference documents have been cited in this office action (their serial numbers will be referred to in the ensuing examination procedure):

Serial No.	Reference document( Number or Title)	Publication Date (or Filing date of interference patent applications)
1	CN2504675Y	07day 08 month 2002 year
2		day month year
3		day month year
4		day month year

6. The result of the examination is as follows:

☒ Description:

☐ The subject matter of the application falls into the scope on which no patent rights shall be granted as provided by Article 5 of the Chinese Patent Law.

☐ The description is not in conformity with the provisions of Article 26(3) of the Chinese Patent Law.

☒ The description is not in conformity with the provisions of Rule 18 of the Implementing Regulations of the Chinese Patent Law.

☒ Claims:

☐ Claim \_\_\_\_\_ falls into the scope, on which no granted patent rights shall be granted, as provided by Article 25 of the Chinese Patent Law.



☐ Claim \_\_\_\_\_ is not in conformity with the definition of invention as prescribed by Rule 2(1) of the Implementing Regulations of the Chinese Patent Law.

☒ Claim 1,14,31,42 does not possess novelty as provided by Article 22(2) of the Chinese Patent Law.

☐ Claim \_\_\_\_\_ does not possess inventiveness as provided by Article 22(3) of the Chinese



# 中华人民共和国国家知识产权局

邮政编码: 100083 北京市海淀区王庄路1号清华同方科技大厦B座15层 中科专利商标代理有限责任公司 戎志敏		发文日期 
申请号: 031240348 		
申请人: 三星电子株式会社		
发明创造名称: 在倾斜结构方面得以改进的监视器		

## 第一次审查意见通知书

- ☒ 应申请人提出的实审请求, 根据专利法第 35 条第 1 款的规定, 国家知识产权局对上述发明专利申请进行实质审查。  
☐ 根据专利法第 35 条第 2 款的规定, 国家知识产权局决定自行对上述发明专利申请进行审查。
- ☒ 申请人要求以其在:  
    KR      专利局的申请日      2002 年 07 月 16 日为优先权日,  
            专利局的申请日      年    月    日为优先权日,  
            专利局的申请日      年    月    日为优先权日,  
            专利局的申请日      年    月    日为优先权日,  
            专利局的申请日      年    月    日为优先权日。  
☒ 申请人已经提交了经原申请国受理机关证明的第一次提出的在先申请文件的副本。  
☐ 申请人尚未提交经原申请国受理机关证明的第一次提出的在先申请文件的副本, 根据专利法第 30 条的规定视为未提出优先权要求。
- ☐ 经审查, 申请人于:  
    年    月    日提交的      不符合实施细则第 51 条的规定;  
    年    月    日提交的      不符合专利法第 33 条的规定;  
    年    月    日提交的
- 审查针对的申请文件:  
☒ 原始申请文件。 ☐ 审查是针对下述申请文件的  
申请日提交的原始申请文件的权利要求第      项、说明书第      页、附图第      页;  
    年    月    日提交的权利要求第      项、说明书第      页、附图第      页;  
    年    月    日提交的权利要求第      项、说明书第      页、附图第      页;  
    年    月    日提交的权利要求第      项、说明书第      页、附图第      页;  
    年    月    日提交的说明书摘要,      年    月    日提交的摘要附图。
- ☐ 本通知书是在未进行检索的情况下作出的。  
☒ 本通知书是在进行了检索的情况下作出的。  
☒ 本通知书引用下述对比文献(其编号在今后的审查过程中继续沿用):  
    编号      文件号或名称      公开日期(或抵触申请的申请日)  
    1      CN2504675Y      2002-08-07(申请日 2001-08-29)
- 审查的结论性意见:  
☒ 关于说明书:  
☐ 申请的内容属于专利法第 5 条规定的不授予专利权的范围。  
☐ 说明书不符合专利法第 26 条第 3 款的规定。



申请号 031240348

☐ 说明书不符合专利法第 33 条的规定。

☒ 说明书的撰写不符合实施细则第 18 条的规定。

☐

☒ 关于权利要求书:

☒ 权利要求 1, 14, 31, 42 不具备专利法第 22 条第 2 款规定的新颖性。

☐ 权利要求 不具备专利法第 22 条第 3 款规定的创造性。

☐ 权利要求 不具备专利法第 22 条第 4 款规定的实用性。

☐ 权利要求 属于专利法第 25 条规定的不授予专利权的范围。

☒ 权利要求 1, 4 不符合专利法第 26 条第 4 款的规定。

☐ 权利要求 不符合专利法第 31 条第 1 款的规定。

☐ 权利要求 不符合专利法第 33 条的规定。

☐ 权利要求 不符合专利法实施细则第 2 条第 1 款关于发明的定义。

☐ 权利要求 不符合专利法实施细则第 13 条第 1 款的规定。

☒ 权利要求 1, 2, 4-7, 9, 10, 13-26, 29, 30, 32, 33, 35-41, 43-51 不符合专利法实施细则第 20 条的规定。

☐ 权利要求 不符合专利法实施细则第 21 条的规定。

☐ 权利要求 不符合专利法实施细则第 22 条的规定。

☐ 权利要求 不符合专利法实施细则第 23 条的规定。

☐

上述结论性意见的具体分析见本通知书的正文部分。

7. 基于上述结论性意见, 审查员认为:

☐ 申请人应按照通知书正文部分提出的要求, 对申请文件进行修改。

☒ 申请人应在意见陈述书中论述其专利申请可以被授予专利权的理由, 并对通知书正文部分中指出的不符合规定之处进行修改, 否则将不能授予专利权。

☐ 专利申请中没有可以被授予专利权的实质性内容, 如果申请人没有陈述理由或者陈述理由不充分, 其申请将被驳回。

☐

8. 申请人应注意下述事项:

(1) 根据专利法第 37 条的规定, 申请人应在收到本通知书之日起的肆个月内陈述意见, 如果申请人无正当理由逾期不答复, 其申请将被视为撤回。

(2) 申请人对其申请的修改应符合专利法第 33 条的规定, 修改文本应一式两份, 其格式应符合审查指南的有关规定。

(3) 申请人的意见陈述书和/或修改文本应邮寄或递交国家知识产权局专利局受理处, 凡未邮寄或递交给受理处的文件不具备法律效力。

(4) 未经预约, 申请人和/或代理人不得前来国家知识产权局专利局与审查员举行会晤。

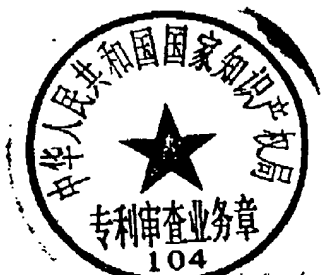
9. 本通知书正文部分共有 8 页, 并附有下列附件:

☒ 引用的对比文件的复印件共 1 份 16 页。 ☐

张

审查员: 张 (9372)

2004 年 9 月 9 日



审查部门 审查协作中心



## 第一次审查意见通知书正文

申请号：03124034.8

一、权利要求1、14、31和42不符合专利法第二十二条第二款的规定。

权利要求1要求保护一种监视器，对比文件1（CN2504675Y）是一件由他人向专利局提出的专利申请，其申请日2001年8月29日早于本申请的优先权日2002年7月16日，授权公告日为2002年8月7日，对比文件1公开了一种支撑臂被改进的显示器，并具体公开了以下技术特征（见对比文件1的说明书第2页倒数第4行至第4页第1段及其附图1至10）：该显示器具有显示图像的液晶显示器主体和与支撑臂一起支撑液晶显示器主体的夹持座（相当于本发明权利要求1中的“基座元件”），该显示器包括一个悬臂（相当于本发明权利要求1中的“连接元件”），该悬臂具有上端和下端，下端横跨第一轴心而组设于底座（相当于本发明权利要求1中的“基座铰链”）的两侧臂上，且令悬臂的下端与底座间能够借助第一轴心形成一可转动的关节，上端横跨第二轴心而与与顶座相互组设，令悬臂的上端与顶座（相当于本发明权利要求1中的“主铰链”）间亦能够以第二轴心形成一可转动的关节（相当于本发明权利要求1中的“分别可旋转地组合于提供在监视器主体中的一个主铰链上和提供在基座元件中的一个基座铰链上”）；连杆（相当于本发明权利要求1中的“辅助连接元件”）两侧壁下端各设有一相对应的轴孔，借由一直径小于该轴孔的第四轴心横跨组设于底座的两侧壁上，连杆下端与底座间能够以第四轴心形成一可转动的关节，连杆的两侧壁上端亦借由第三轴心的穿置而设于顶座上的两侧壁上，连杆的两侧壁上端与顶座间形成一可转动的关节（相当于本发明权利要求1中的“一个连接主铰链和基座铰链并与连接元件平行设置的辅助连接元件，辅助连接元件与主铰链和基座铰链不同心”）；衔接座（相当于本发明权利要求1中的“主支架”）装设于顶座上并将借助于悬臂支撑液晶显示器主体（由此可惟一导出衔接座位于液晶显示器主体和悬臂之间）；顶座上端设有一转向接头（相当于本发明权利要求1中的“枢轴部件”），液晶显示器主体借助转向接头做仰角的调整及左、右角度调整（相当于本发明权利要求1中的“围绕主支架以枢轴形式转动监视器主体”）。由此可知，对比文件1公开了该权利要求的全部技术特征，且对比文件1所公开的技术方案与该权利要求请求保护的技术方案属于同一技术领域，所要解决的技术问题相同，采用了相同的技术方案，并能产生相同的技术效果，因此该对比文件构成了本申请权利要求1的抵触申请，从而使该权利要求所要求保护

的技术方案不符合专利法第二十二条第二款有关新颖性的规定。

权利要求14对权利要求1作了进一步的限定，对比文件1还公开了以下技术特征：底座的底面结合在夹持座上，连杆两侧壁下端各设有一相对应的轴孔，借由一直径小于该轴孔的第四轴心横跨组设于底座的两侧壁（该两侧壁靠近夹持座的部分相当于本发明权利要求14中的“第一和第二支撑支架”，该两侧壁与连杆轴接的部分相当于本发明权利要求14中的“第一和第二基座铰链部件”）上，连杆下端与底座间能够以第四轴心形成一可转动的关节。因此，当其引用的权利要求1不具备新颖性时，权利要求14不符合专利法第二十二条第二款有关新颖性的规定。

权利要求31对权利要求1作了进一步的限定，对比文件1还公开了以下技术特征：底座（该底座容纳连杆的部分相当于本发明权利要求31中的“连接元件容纳部分”）的底面结合在夹持座上，连杆两侧壁下端各设有一相对应的轴孔，借由一直径小于该轴孔的第四轴心横跨组设于底座的两侧壁上。因此，当其引用的权利要求1不具备新颖性时，权利要求31不符合专利法第二十二条第二款有关新颖性的规定。

权利要求42对权利要求1作了进一步的限定，对比文件1还公开了以下技术特征：连杆的两侧壁上端亦借由第三轴心的穿置而设于顶座上的两侧壁上，连杆的两侧壁上端与顶座间形成一可转动的关节（由此可以惟一导出液晶显示器主体可前后倾斜使其平行于衔接件设置）。因此，当其引用的权利要求1不具备新颖性时，权利要求42不符合专利法第二十二条第二款有关新颖性的规定。

## 二、权利要求1和权利要求4不符合专利法第二十六条第四款的规定。

1、权利要求1中记载的特征“提供在监视器主体中的一个主铰链”与说明书第9页第7行中的相应描述“与监视器主体120相结合的主支架170的一个主铰链70”不一致，并且也不能从说明书中公开的内容直接得到或者概括得出，因此该权利要求没有以说明书为依据，不符合专利法第二十六条第四款的规定。申请人应当对该权利要求中的有关内容进行修改。

2、权利要求1中记载的特征“支撑监视器主体的基座元件”与说明书第7页第4行至第12页第19行的相应描述（基座元件通过基座铰链、连接元件、辅助连接元件、主铰链、主支架等部件协同工作支撑监视器主体）不一致，并且也不能从说明书中公开的内容直接得到或者概括得出，因此该权利要求没有以说明书为依据，不符合专利法第二十六条第四款的规定。申请人应当对该权利要求中的有关内容进行修改。

3、权利要求4中的(枢轴部件包括)“一个贯穿主支架形成的第一通孔”和“一个贯穿监视器支架形成的第二通孔,并具有一个从监视器支架的中心向主支架伸出的突出部分”与说明书第7页第17行至第19行的描述“主支架170的第一通孔171具有一个圆形形状,监视器支架180的第二通孔181具有一个相应于第一通孔171的圆形形状。第二通孔181形成在一个从监视器支架180的中心朝主支架170伸出的突出部分183”不一致,因此该权利要求没有以说明书为依据,不符合专利法第二十六条第四款的规定。申请人应当对该权利要求或说明书中的有关内容进行修改。

三、权利要求1、2、4至7、9、10、13至26、29、30、32、33、35至41、43至51不符合专利法实施细则第二十条第一款的规定。

1、权利要求1中“主支架”怎样被固定以及固定于什么部件上不清楚,申请人应根据说明书的记载对其进行修改。同理,权利要求50和权利要求51也存在上述缺陷。

2、权利要求1中的“一个围绕主支架以枢轴形式转动监视器主体的枢轴部件”含义不清楚,首先,不清楚“枢轴部件”的位置以及其与其他部件的连接关系;其次,不清楚“枢轴部件”以何种方式“围绕主支架”。申请人应根据说明书的记载对上述缺陷进行修改。

3、权利要求1中“监视器”各个组成部件如何协同工作不清楚,因为权利要求1要求保护的“监视器”的组成部件在结构上是可相对运动的,但根据权利要求1的说明,本领域技术人员不清楚监视器的各个组成部件如何协同工作(例如,连接元件以及辅助连接元件与主铰链组合可对监视器主体的倾斜度进行控制,固定在监视器主体上的主支架与枢轴部件组合可对监视器主体的平面旋转进行控制,连接元件与基座铰链组合可对监视器主体的高度进行控制),因此,申请人应根据说明书的记载在该权利要求中对其进行说明。同理,权利要求50和权利要求51也存在上述缺陷。

4、权利要求2中“监视器支架”怎样被固定以及固定于什么部件上不清楚,申请人应根据说明书的记载对其进行修改。同理,权利要求50和权利要求51也存在上述缺陷。

5、权利要求4中“垫圈”与其他部件(例如铆钉)的结构关系以及其所起的作用不清楚,申请人应根据说明书的记载对其进行修改。

6、权利要求4中的“具有一个预先确定的摩擦力”含义不清楚,首先,不清楚这里的“摩擦力”指的是哪个部件与哪个部件之间的摩擦力;其次,不清楚怎样“预先确

定”“摩擦力”以及如何保证“摩擦力”是“预先确定的”。申请人应根据说明书的记载对其进行修改。

7、权利要求4中“电缆通孔”与“铆钉”的结构关系不清楚，申请人应根据说明书的记载对其进行修改。

8、权利要求5中的“一个限制主支架上监视器支架的枢轴转动角的枢轴转动角限制部件”含义不清楚，首先，“主支架上监视器支架”表述不清楚，根据说明书的记载，申请人可将其修改为“监视器支架相对于主支架以枢轴形式转动”；其次，“枢轴转动角限制部件”的位置不清楚。申请人应根据说明书的记载对上述缺陷进行修改。

9、权利要求6中的“一个相邻第一和第二通孔中的一个提供的枢轴凸起”含义不清楚，首先，“相邻第一和第二通孔中的一个提供”含义不清楚；其次，“枢轴凸起”的位置不清楚。申请人应根据说明书的记载对其进行修改。

10、权利要求6中的“类似于”含义不确定，申请人应将其修改为“为”。

11、权利要求6中“导槽”的位置不清楚，申请人应根据说明书的记载对其进行修改。

12、权利要求7中的“其”指代的含义不清楚，申请人应明确写明“其”所指代的内容。

13、权利要求7中的“后部”含义不清楚，申请人应明确写明这里的“后部”如何定义以及是相对于什么而言的“后部”。

14、权利要求9中的“其”指代的含义不清楚，申请人应明确写明“其”所指代的内容。

15、权利要求10“基座支架”的结构不清楚，也不清楚其如何“把基座元件安装在一个倾斜的平面上”。申请人应根据说明书的记载对上述缺陷进行修改。

16、权利要求10中的“后部”含义不清楚，申请人应明确写明这里的“后部”如何定义以及是相对于什么而言的“后部”。

17、权利要求13中的“VESA（视频电子标准协会）”应改为“视频电子标准协会VESA”。

18、权利要求14中的“一对儿第一和第二支撑支架”含义不清楚，不清楚“一对”修饰的对象是什么，并且“一对儿”应改为“一对”。同理，权利要求20也存在上述缺陷。

19、权利要求14中的“相对的侧”表述不清楚，申请人可以将其修改为“相对两侧”。同理，权利要求20也存在上述缺陷。



20、权利要求15中的“内侧”含义不清楚，申请人应明确写明这里的“内侧”如何定义以及是相对于什么而言的“内侧”。

21、权利要求15中“第一铰链销容纳部分”的位置和结构不清楚，申请人应根据说明书的记载对其进行修改。申请人在修改的同时，注意对权利要求32中的“第一铰链销容纳部分”作相应的修改。

22、权利要求16中“弹簧支撑部分”的位置不清楚，申请人应根据说明书的记载对其进行修改。

23、权利要求16中的“这一扭转弹簧具有相对基座元件沿与连接元件向下旋转的相反的方向作用的弹力”表述不清楚，申请人应根据说明书的记载将该语句表示的含义表述清楚。

24、权利要求17中的“第二侧”含义不清楚，由于在该权利要求引用的权利要求中并未对“第一侧”进行过定义，导致该权利要求中“第二侧”表示的含义不清楚，申请人应明确写明这里的“第二侧”如何定义以及是相对于什么而言的“第二侧”或者修改该权利要求的引用关系。同理，权利要求19也存在上述缺陷。

25、权利要求17中的“内侧”含义不清楚，申请人应明确写明这里的“内侧”如何定义以及是相对于什么而言的“内侧”。

26、权利要求18中的“旋转角限制部件”的结构和位置不清楚，申请人应根据说明书的记载对其进行修改。

27、权利要求19中的“一对儿”和“这对儿”应分别改为“一对”和“这对”。

28、权利要求19中的“第二销容纳部分”和“第二销支撑部分”含义不清楚，因为在其引用的权利要求中未对它们进行定义，因此申请人应明确写明“第二销容纳部分”和“第二销支撑部分”各自的位置和结构，或者修改该权利要求的引用关系。

29、权利要求19中的“彼此相对”含义不清楚，申请人应明确写明什么部件“彼此”什么（例如位置、结构）“相对”。

30、权利要求21中“第三支架”的位置和结构不清楚，申请人应根据说明书的记载对其进行修改。

31、权利要求21中的“其”含义不清楚，申请人应明确写明“其”指代的内容。同理，权利要求22也存在上述类似缺陷。

32、权利要求21中“具有一个抗拒第三铰链销的旋转的力”的主语不清楚，申请人应明确写明其主语。

33、权利要求22中“连接元件上端的相对侧之间”表述不清楚，申请人应根据说明书的记载将其表示的含义表述清楚。

34、权利要求23中的“倾斜角限制部件”的结构和位置不清楚，申请人应根据说明书的记载对其进行修改。

35、权利要求24中“形成在相邻第三摩擦弹簧的第四支撑支架上的弧形切割部分”含义不清楚，首先，在该权利要求引用的权利要求中未对“第三摩擦弹簧”进行定义，因此申请人应明确写明“第三摩擦弹簧”的位置或修改该权利要求的引用关系；其次，上述语句表述不清楚，申请人应根据说明书的记载将其表示的含义表述清楚。

36、权利要求24中“第四铰链销”的位置不清楚，在该权利要求引用的权利要求中未对“第四铰链销”进行定义，因此申请人应明确写明“第四铰链销”的位置或修改该权利要求的引用关系。

37、权利要求24中“与弧形切割部分相对的端相结合”的“相对的端”含义不清楚，申请人应明确说明其所表示的含义。

38、权利要求25中的“成对儿”应改为“成对”。

39、权利要求25中的“其”含义不清楚，申请人应明确写明“其”指代的内容。

40、权利要求26中的“相反的端”含义不清楚，申请人应明确说明其所表示的含义。

41、权利要求29中“以与第二通孔同轴并相间隔”的“以”应删去。

42、权利要求29中的“以至于可把枢轴凸起的枢轴转动角限制在导槽中”表述不清楚，其中的“以至于可”应删去；并且“枢轴转动角限制在导槽中”的表述不清楚，申请人应将其修改为“枢轴转动角”限制在什么范围或者利用导槽限制“枢轴转动角”。

43、权利要求30中“枢轴凸起”和“导槽”各自的结构和所起的作用不清楚，申请人应根据说明书的记载对其进行修改。

44、权利要求33中“其”指代的含义不清楚，“具有一个预确定的摩擦力”缺主语，并且“预确定的摩擦力”的定义不清楚，。

45、权利要求35中“导致了一个沿与连接元件相连接的监视器主体向前旋转的相反的方向作用的力”表述不清楚，申请人可以将其修改为“产生一个沿与连接元件相连接的监视器主体向前旋转的方向相反的作用力”或者根据说明书的记载作相应的修改。

46、权利要求36中“使用一个很小的力相对基座元件旋转连接元件”的主语不清楚。

47、权利要求37中“辅助元件”的位置不清楚，申请人应根据说明书的内容对其进行修改。同理，权利要求38和权利要求41也存在上述缺陷。

48、权利要求38中“第二和第三摩擦弹簧会围绕第三和第四铰链销旋转，从而防止了辅助元件和第二连接支撑件的旋转”表述的结构不清楚，本领域技术人员据此并不清楚什么样的结构能够达到“第二和第三摩擦弹簧会围绕第三和第四铰链销旋转，从而防止了辅助元件和第二连接支撑件的旋转”的效果，因此，申请人应根据说明书的记载明确写明能够达到该效果的结构。

49、权利要求39中的“大于”前应加一个“均”或“都”字。

50、权利要求40中如何“通过弧形切割部分和倾斜限制垫圈的凸起的设计，确定一个倾斜角度范围”不清楚，申请人应明确写明“弧形切割部分”和“倾斜限制垫圈的凸起”怎样设计。

51、权利要求41中“辅助元件把连接元件相对基座元件的旋转运动传递到监视器主体的倾斜运动”的“传递”表示的含义不清楚。同理，权利要求43中的“传递”也存在上述缺陷。

52、权利要求44中“把相对连接元件的监视器主体的倾斜度与相对基座元件的连接元件的旋转互锁”表述的结构不清楚，申请人应明确写明通过何种结构实现“旋转互锁”。

53、权利要求45中“臂架”“第四组合孔”的位置和所起的作用不清楚，也不清楚“监视器支撑零件”怎样“配备”于臂架以及其所起的作用，并且“VESA”应改为“视频电子标准协会VESA”。

54、权利要求46中“第三组合孔”的位置不清楚，申请人应根据说明书的记载对其进行修改或者修改该权利要求的引用关系。

55、权利要求47中“第一和第二铰链部件”的位置不清楚，并且“扭转弹簧”怎样配备于“第一和第二铰链部件至少之一”也不清楚，申请人应根据说明书的记载对缺陷进行修改。

56、权利要求48中“倾斜角限制部件”的位置和结构不清楚，也不清楚“第一和第二主铰链部件至少之一”怎样“配备有一个倾斜角限制部件”，申请人应根据说明书的记载对上述缺陷进行修改。

57、权利要求49中“在倾斜位置、……，同时可在……维持倾斜位置”表述的结构不清楚，申请人根据说明书的记载明确写明达到上述效果的结构。

58、权利要求51中“基座支架”的结构不清楚，也不清楚其如何“把基座元件安装在一个倾斜的平面上”。申请人应根据说明书的记载对上述缺陷进行修改。

59、权利要求51不简要，虽然权利要求51中的“把监视器支架连接到主支架上”在权利要求50中的表述为“把主支架连接到监视器支架上”，但是其表示的含义实质上相同，那么权利要求51就包含了权利要求50中的所有内容，因此，权利要求51应采取引用权利要求50的方式撰写为权利要求50的从属权利要求。

基于上述理由，权利要求1、2、4至7、9、10、13至26、29、30、32、33、35至41、43至51不符合专利法实施细则第二十条第一款的规定。申请人在对权利要求书进行上述修改的同时，应注意对说明书的“发明内容”部分作相应的修改。

四、说明书不符合专利法实施细则第十八条第一款、第二款和第三款的规定。

说明书第1页的标题“对相关申请的交叉参照”应删去，以使说明书的撰写符合专利法实施细则第十八条第一款和第二款的规定。

说明书第1页第17行“连接连接在一起”表述不清楚，不符合专利法实施细则第十八条第三款的规定。申请人可将其修改为“连接在一起”。

综上所述，本申请按照目前的文本是不能被授权的。申请人应根据上述审查意见在指定的答复期限内提交修改后的权利要求书和/或说明书，并且对原申请文本的修改应满足专利法第三十三条的规定，不得超出原说明书和原权利要求书记载的范围。另外，任何主动性的修改将可能导致文本不能被接受。申请人应提供修改所涉及的原文复印件，并将修改之处用彩笔标示清楚。

# [12] 实用新型专利说明书

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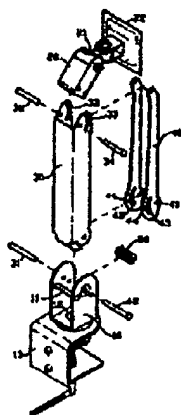
代理人 郑永康

权利要求书 1 页 说明书 4 页 附图页数 10 页

[54] 实用新型名称 改进的显示器支撑臂

[57] 摘要

一种改进的显示器支撑臂,由底座、顶座、悬臂、连杆与弹簧构成;底座概呈一U字形座体;顶座概呈一门字形座体;悬臂概呈一截面呈门字形的杆体;连杆概呈一截面呈U字形的杆体;连杆的两侧壁下端各设有一相对应的弧形槽孔,该弧形槽孔恰供第一轴心穿越;弹簧为一卷绕式弹簧而套设于第一轴心上;底座的两侧壁接近后侧缘横跨设有一止挡杆;该连杆的两侧壁下端后缘各形成一以轴孔为圆心的圆弧边,该连杆两侧壁下端所设的轴孔孔径大于穿置于其中的第四轴心轴径;该止挡杆的位置高于第四轴心。本实用新型可免除支撑力调整机构,具有构造更为精简,降低制造成本,令使用更加方便的优点。



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## 权 利 要 求 书

一种改进的显示器支撑臂，其特征是由底座、顶座、悬臂、连杆与弹簧构成；

- 5        所述底座概呈一□字形座体，其底面以一轴结合一夹持座或其他型式的定位座，底座可借助轴旋转；

所述顶座概呈一门字形座体，其上端依序设有一转向接头与一可供液晶显示器固定组设的衔接座；

- 10       所述悬臂概呈一截面呈门字形的杆体，其两侧壁下端横跨一第一轴心而组设于底座的两侧壁上，令悬臂的下端与底座间以第一轴心形成一可转动的关节，而悬臂的两侧壁上端亦横跨一第二轴心而与顶座相互组设，令悬臂的上端与顶座间亦借助第二轴心形成一可转动的关节；又，悬臂的两侧上端各设有一相对应的弧形槽孔，该弧形槽孔借助一第三轴心的穿置而横跨设于顶座上的两侧臂上；

- 15       所述连杆概呈一截面呈□字形的杆体，其两侧壁下端各设有一相对应的轴孔，借由一第四轴心横跨组设于底座的两侧壁上，令连杆的下端与底座间借助第四轴心形成一可转动的关节；又，连杆的两侧壁下端各设有一相对应的弧形槽孔，该弧形槽孔恰供第一轴心穿越；连杆的两侧壁上端借此第三轴心的穿置而设于顶座上的两侧壁上，并令连杆的两侧壁上端与顶座间形成一
- 20       可转动的关节；

所述弹簧，为一卷绕式弹簧而套设于第一轴心上，该弹簧的一端顶设于连杆上，另一端顶设于第四轴心上，令连杆具有一适当的往上作用力；

- 其特征是所述底座的两侧壁接近后侧缘横跨设有一止挡杆；该连杆的两侧壁下端后缘各形成一以轴孔为圆心的圆弧边，该连杆两侧壁下端所设的轴
- 25       孔孔径大于穿置于其中的第四轴心轴径；该止挡杆的位置高于第四轴心。

# 说明书

## 改进的显示器支撑臂

### 一、技术领域:

本实用新型涉及一种支撑构件,尤其涉及一种可免除支撑力调整机构,具有构造更为精简,降低制造成本,令使用更加方便的改进的显示器支撑臂。

### 二、背景技术:

以往的电脑显示器,均直接摆设于桌面上供使用,因此极为占据桌面的使用空间。为增加桌面的使用空间,一种可将显示器架高于桌面上,并可依使用者需要调整高度的支撑臂遂被设计出来。然而,习用的显示器支撑臂,其用以支撑显示器的支撑力,一般是来自设置于支撑臂中的张力弹簧 70 (如图 1 所示)或气压缸 80 (如图 2 所示)。而不论是以张力弹簧 70 或气压缸 80 作为支撑力的来源,由于不同厂牌、不同型式的显示器的重量不同,因此为适用于不同厂牌、不同型式的显示器,其均必须设有可调整支撑力的支撑力调整机构 90,从而增加支撑臂的结构复杂性,进而增加支撑臂的制造成本。再者,当消费者将支撑臂购回使用时,亦必须依其显示器的重量调整其支撑力,这又增加消费者在使用上的不方便性。另,由于张力弹簧 70 及气压缸 80 在使用时,难免会出现弹性疲劳及漏气的现象,因此这种以张力弹簧 70 或气压缸 80 作为支撑力的支撑臂,亦必须时常加以调整其支撑力,又增加使用上的不便。

### 三、发明内容:

本实用新型的目的在于,为改善上述习用显示器支撑臂存在的缺点,而提供一种改进的显示器支撑臂,其可免除支撑力调整机构,具有构造更为精简,降低制造成本,令使用更加方便的优点。

本实用新型的目的是由以下技术方案实现的。

一种改进的显示器支撑臂,由底座、顶座、悬臂、连杆与弹簧构成;所述底座概呈一U字形座体,其底面以一轴结合一夹持座或其他型式的定位座,底座可借助轴旋转;所述顶座概呈一T字形座体,其上端依序设有一转向接头与一可供液晶显示器固定组设的衔接座;所述悬臂概呈一截面呈T字形的杆体,其两侧壁下端横跨一第一轴心而组设于底座的两侧壁上,令悬臂的下端与底座间以第一轴心形成一可转动的关节,而悬臂的两侧壁上端亦横

跨一第二轴心而与顶座相互组设，令悬臂的上端与顶座间亦借助第二轴心形成一可转动的关节；又，悬臂的两侧上端各设有一相对应的弧形槽孔，该弧形槽孔借助一第三轴心的穿置而横跨设于顶座上的两侧臂上；所述连杆概呈一截面呈U字形的杆体，其两侧壁下端各设有一相对应的轴孔，借由一第四轴心横跨组设于底座的两侧壁上，令连杆的下端与底座间借助第四轴心形成一可转动的关节；又，连杆的两侧壁下端各设有一相对应的弧形槽孔，该弧形槽孔恰供第一轴心穿越；连杆的两侧壁上端借此第三轴心的穿置而设于顶座上的两侧壁上，并令连杆的两侧壁上端与顶座间形成一可转动的关节；所述弹簧，为一卷绕式弹簧而套设于第一轴心上，该弹簧的一端顶设于连杆上，另一端顶设于第四轴心上，令连杆具有一适当的往上作用力；其特征是所述底座的两侧壁接近后侧缘横跨设有一止挡杆；该连杆的两侧壁下端后缘各形成一以轴孔为圆心的圆弧边，该连杆两侧壁下端所设的轴孔孔径大于穿置于其中的第四轴心轴径；该止挡杆的位置高于第四轴心。

本实用新型可免除支撑力调整机构，具有构造更为精简，降低制造成本，令使用更加方便的优点。

#### 四、附图说明：

图 1 是以张力弹簧作为支撑力的习用显示器支撑臂的剖视构造图。

图 2 是以气压缸作为支撑力的习用显示器支撑臂的剖视构造图。

图 3 是本实用新型的分解立体构造图。

图 4 是本实用新型的剖视构造图。

图 5 是图 2 所示 A 部分的放大示意图。

图 6 是本实用新型的动作示意图。

图 7 是图 4 所示 B 部分的放大示意图。

图 8 是本实用新型借助顶座的转向接头做仰角调整的动作示意图。

图 9 是本实用新型液晶显示器借助顶座的转向接头做左、右角度调整的动作示意图。

图 10 是本实用新型悬臂借助底座的轴做左、右角度调整的动作示意图。

#### 五、具体实施方式：

如图 3 所示，本实用新型由一底座 10、顶座 20、悬臂 30、连杆 40 与一弹簧 50 等元件构成；其中：

底座 10（请同时参阅图 4、5 所示），概呈一U字形座体，其两侧壁接近后侧缘横跨设有一止挡杆 11；底座 10 的底面以一轴 12 结合一夹持座 13，



借由夹持座 13 可将整个显示器支撑臂夹持固定于桌缘，底座 10 可绕轴 12 旋转。该夹持座 13 亦可为其他型式的定位座。

顶座 20 (请同时参阅图 4、5 所示)，概呈一门字形座体，其上端依序设有一转向接头 21 与一可供液晶显示器 60 固定组设的衔接座 22。

悬臂 30 (请同时参阅图 4、5 所示)，概为一截面呈门字形的杆体，其两侧壁下端横跨一第一轴心 31 而组设于底座 10 的两侧壁上，且令悬臂 30 的下端与底座 10 间能够借助第一轴心 31 形成一可转动的关节，而悬臂 30 的两侧壁上端亦横跨一第二轴心 32 而与顶座 20 相互组设，令悬臂 30 的上端与顶座 20 间亦能够以第二轴心 32 形成一可转动的关节。又，悬臂 30 的两侧上端各设有一相对应的弧形槽孔 33，该弧形槽孔 33 借由一第三轴心 34 的穿置而横跨设于顶座 20 上的两侧壁上。

连杆 40 (请同时参阅图 4、5 所示)，概为一截面呈口字形的杆体，其两侧壁下端各设有一相对应的轴孔 41，借由一直径小于轴孔 41 的第四轴心 42 横跨组设于底座 10 的两侧壁上，并令连杆 40 的下端与底座 10 间能够以第四轴心 42 形成一可转动的关节，且轴孔 41 的孔径因大于第四轴心 42 的轴径，故轴孔 41 与第四轴心 42 间具有一可位移的间隙空间。又，连杆 40 的两侧壁下端各设有一相对应的弧形槽孔 43，该弧形槽孔 43 则恰可供第一轴心 31 穿越。再有，连杆 40 的两侧壁下端后缘各形成一以轴孔 41 为圆心的圆弧边 44。连杆 40 的两侧壁上端亦借由第三轴心 34 的穿置而设于顶座 20 上的两侧壁上，并令连杆 40 的两侧壁上端与顶座 20 间形成一可转动的关节。

弹簧 50 (请同时参阅图 4、5 所示)，为一卷绕式弹簧而套设于第一轴心 31 上，该弹簧 50 的一端顶设于连杆 40 上，另一端顶设于第四轴心 42 上，令连杆 40 具有一适当的往上作用力。

借由上述结构，其中第二轴心 32 与第三轴心 34 所连成的直线将和第一轴心 31 与第四轴心 42 所连成的直线保持平行状，且止挡杆 11 的位置高于第四轴心 42。因此，当连杆 40 不动作时 (如图 4、5 所示)，由于连杆 40 受液晶显示器 60 的重力作用而呈下垂状态，同时由于此时连杆 40 的轴孔 41 圆心至圆弧边 44 的距离大于第四轴心 42 圆心至圆弧边 44 的距离，故连杆 40 两侧壁下端后缘所设的圆弧边 44 与止挡杆 11 产生卡抵作用 (如图 5 所示)，而令悬臂 30 得到一支撑力，进而用以支撑装设于顶座 20 的衔接座 22 上的液晶显示器 60。当欲调整液晶显示器 60 的高、低位置时，仅须用手从液晶显示器 60 的下端往上轻轻扳动 (如图 6、7 所示)，则由于连杆 40 两侧壁下

端所设的轴孔 41 孔径大于穿置于其中的第四轴心 42 轴径，亦即轴孔 41 与第四轴心 42 间具有一可位移的空间，因此连杆 40 即会随之往上移。此时，连杆 40 两侧壁下端后缘所设的圆弧边 44 将与止挡杆 11 脱离，而使原先相互卡抵的作用消除（如图 7 所示），进而可顺利的移动悬臂 30 及连杆 40，以达到调整液晶显示器 60 的高、低位置。当调整后，仅须令手离开液晶显示器 60 的下缘，则连杆 40 即会自动下移，令连杆 40 两侧壁下端后缘的圆弧边 44 与止挡杆 11 重新产生卡抵作用，进而令悬臂 30 得到一支撑力，以支撑液晶显示器 60。另，在调整液晶显示器 60 的高、低位置过程中，由于第二轴心 32 与第三轴心 34 所连成的直线和第一轴心 31 与第四轴心 42 所连成的直线保持平行状，因此液晶显示器 60 的角度并不会随悬臂 30 的角度调整而改变。再者，液晶显示器 60 亦可借助顶座 20 的转向接头 21 做仰角的调整（如图 8 所示）及左、右角度调整（如图 9 所示），而悬臂 30 亦可借助底座 10 的轴 12 做左、右角度调整（如图 10 所示）。

从以上所述及附图所示的实施例可知，本实用新型主要在于借助连杆 40 两侧壁下端后缘的圆弧边 44 设计，使连杆 40 不动作时，连杆 40 的轴孔 41 圆心至圆弧边 44 的距离大于第四轴心 42 圆心至圆弧边 44 的距离，使连杆 40 两侧壁下端后缘所设的圆弧边 44 与止挡杆 11 产生卡抵作用，而令悬臂 30 得到一支撑力，进而用以支撑装设于顶座 20 的衔接座 22 上的液晶显示器 60。因此，本实用新型在使用上并不会产生习用结构会产生弹簧弹性疲劳或气压缸漏气的现象，而无须调整其支撑力，故除了使用上更为方便之外，构造更为精简，从而降低制造成本。因此，本实用新型所运用的技术手段及其构造确可达到本实用新型的目的，而与习用的显示器支撑臂相比，确具有显著的实用性与进步性，且确为未曾有过，符合新型专利要件，故依法提出申请。

以上所述，仅是本实用新型的较佳实施例而已，并非对本实用新型作任何形式上的限制，凡是依据本实用新型的技术实质对以上实施例所作的任何简单修改、等同变化与修饰，均仍属于本实用新型技术方案的范围内。

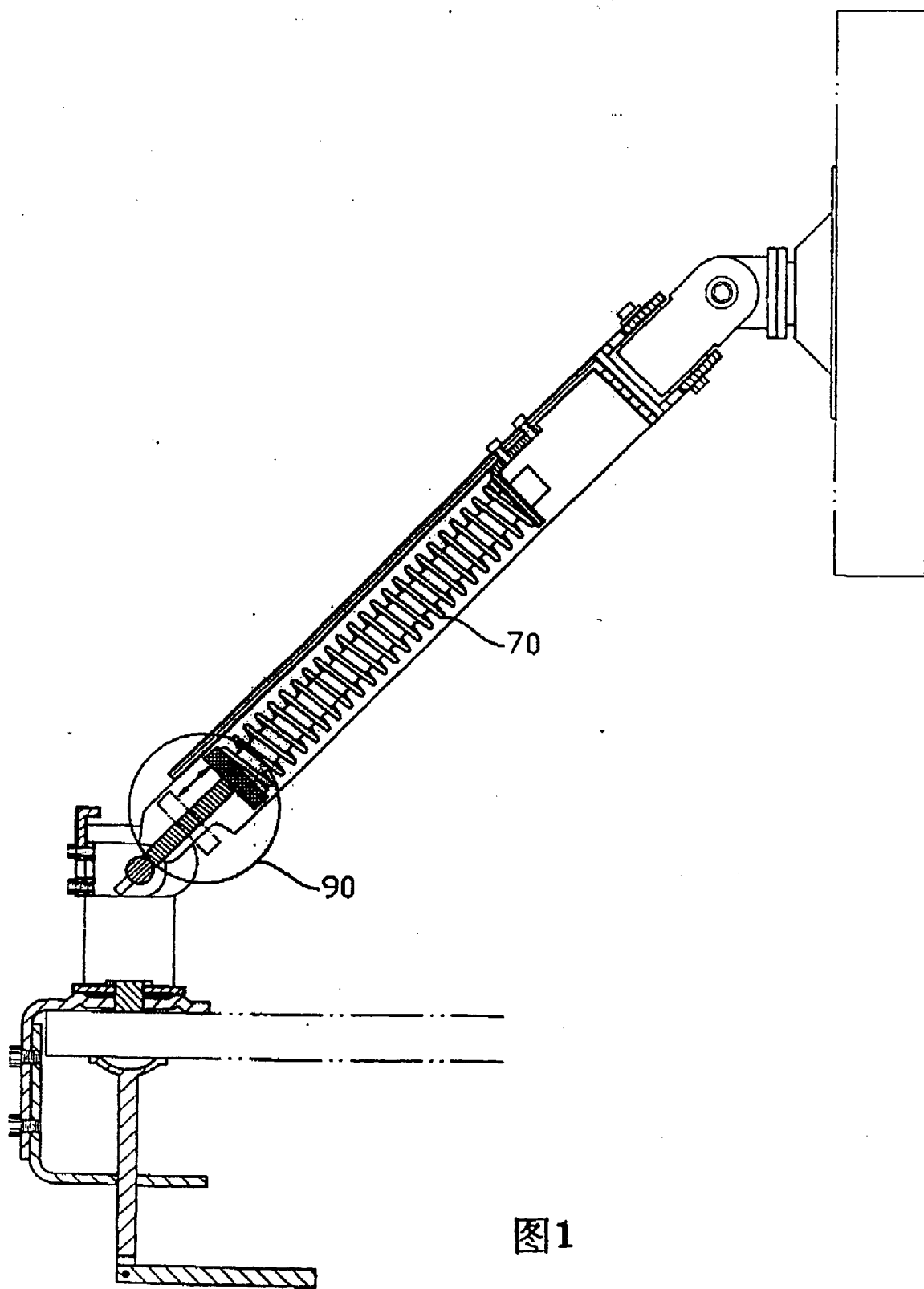


图1

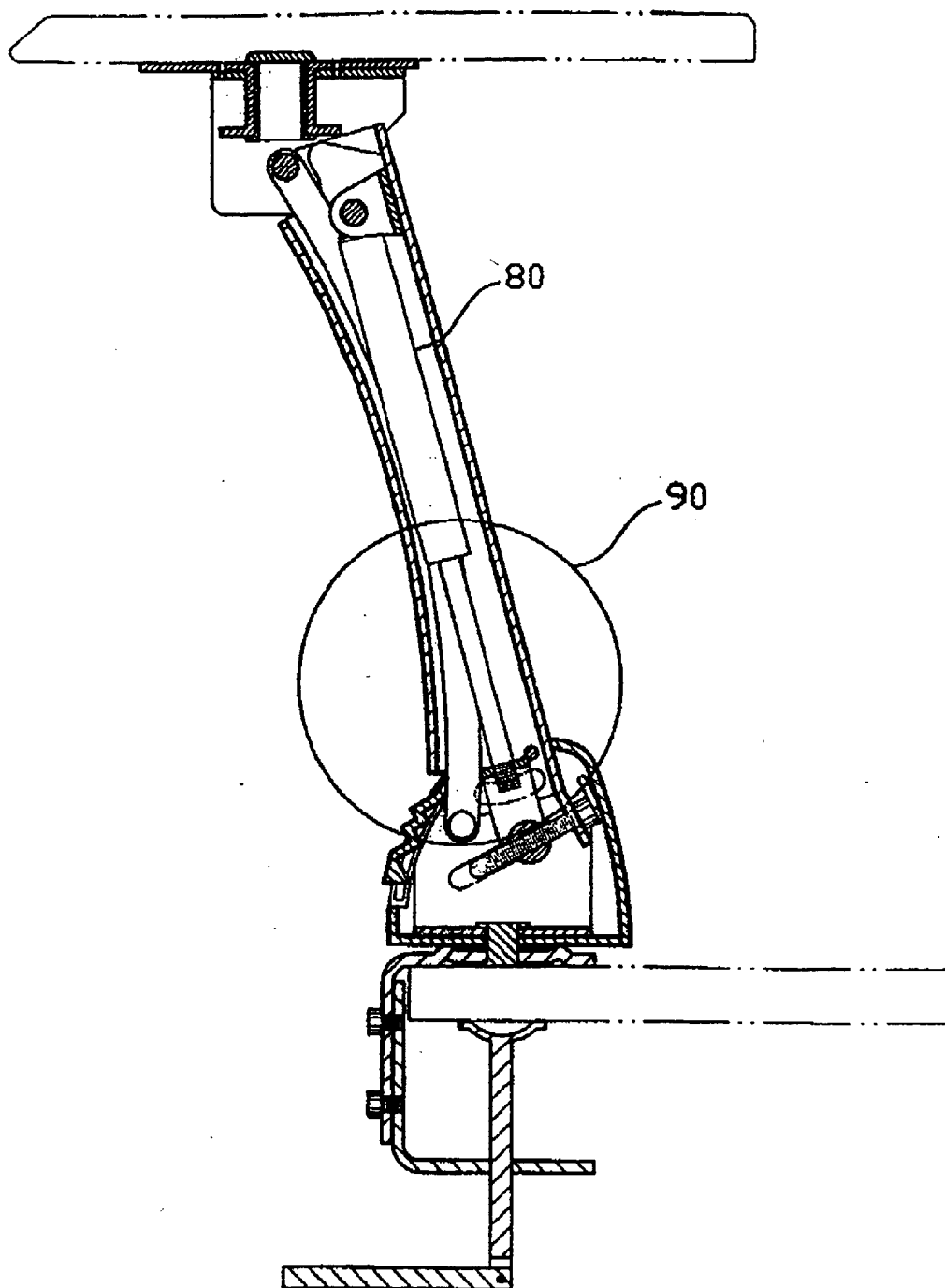


图 2

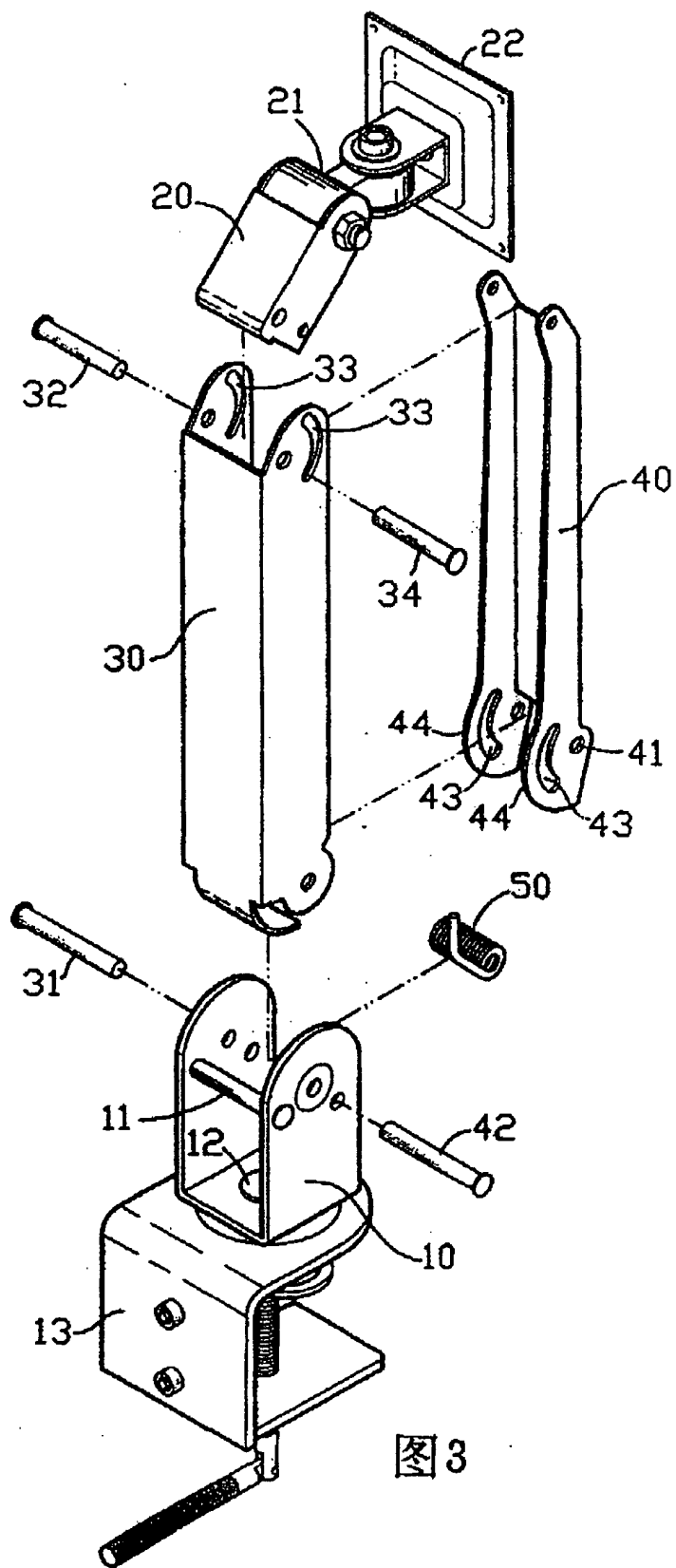


图 3

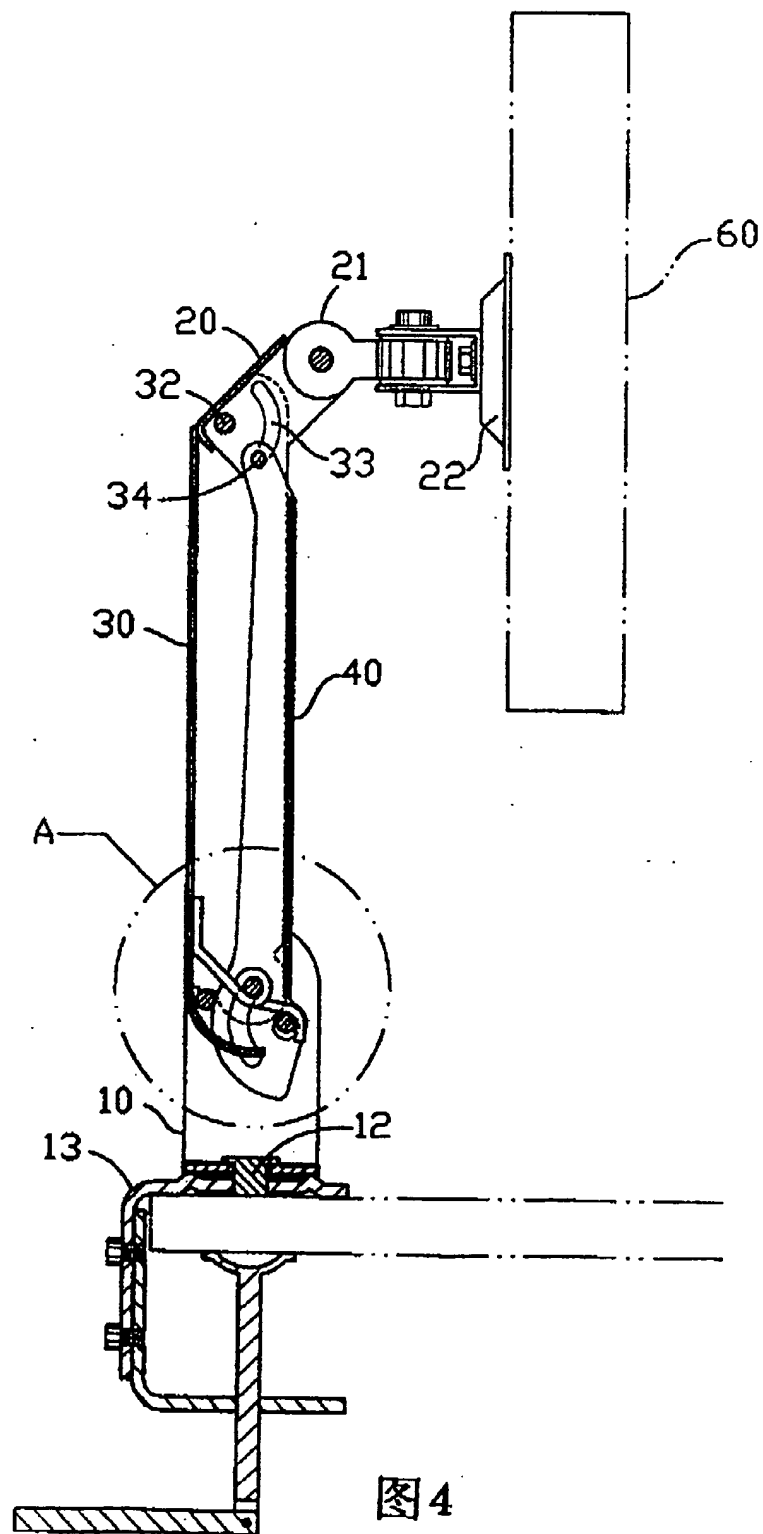


图 4

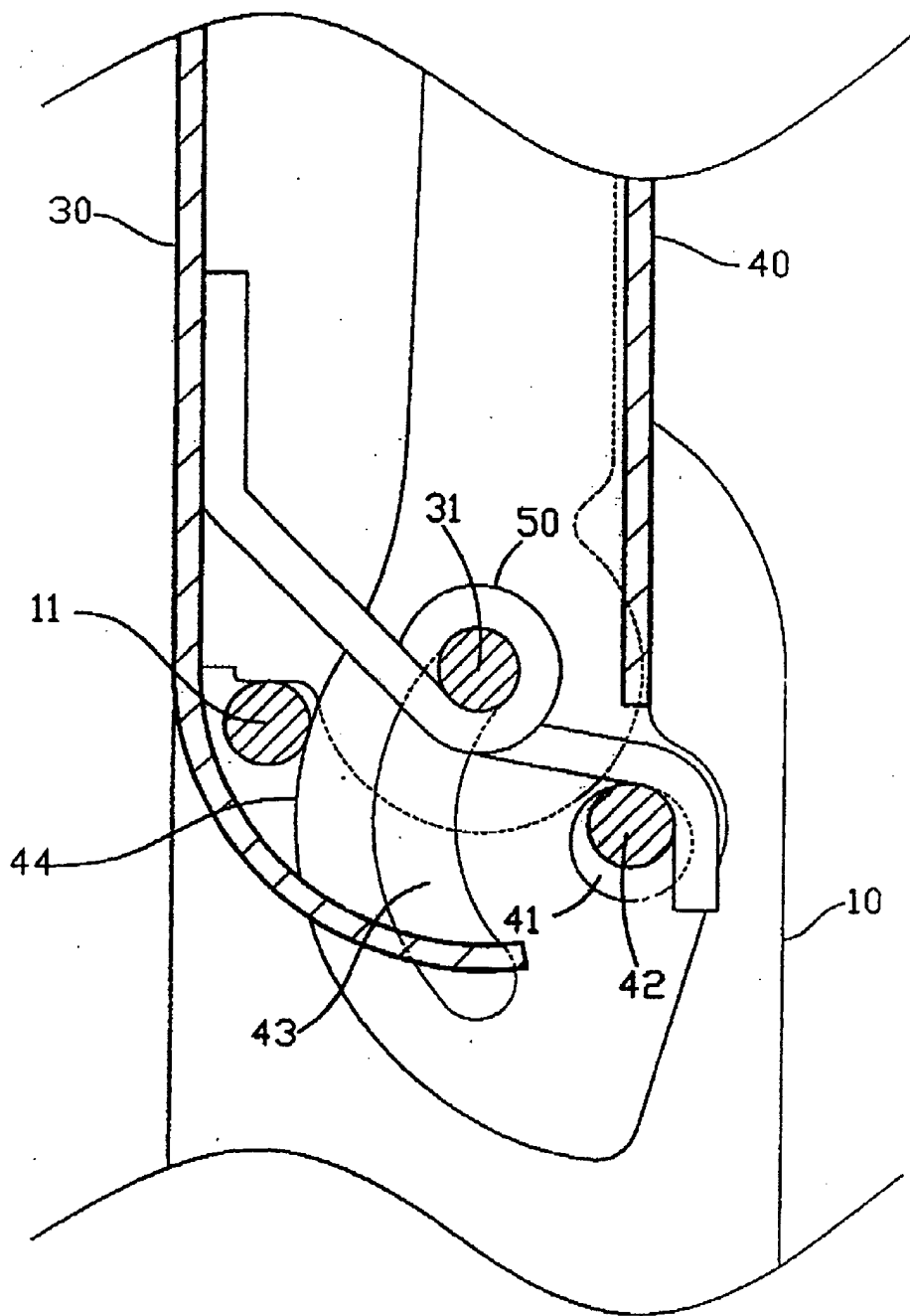


图5

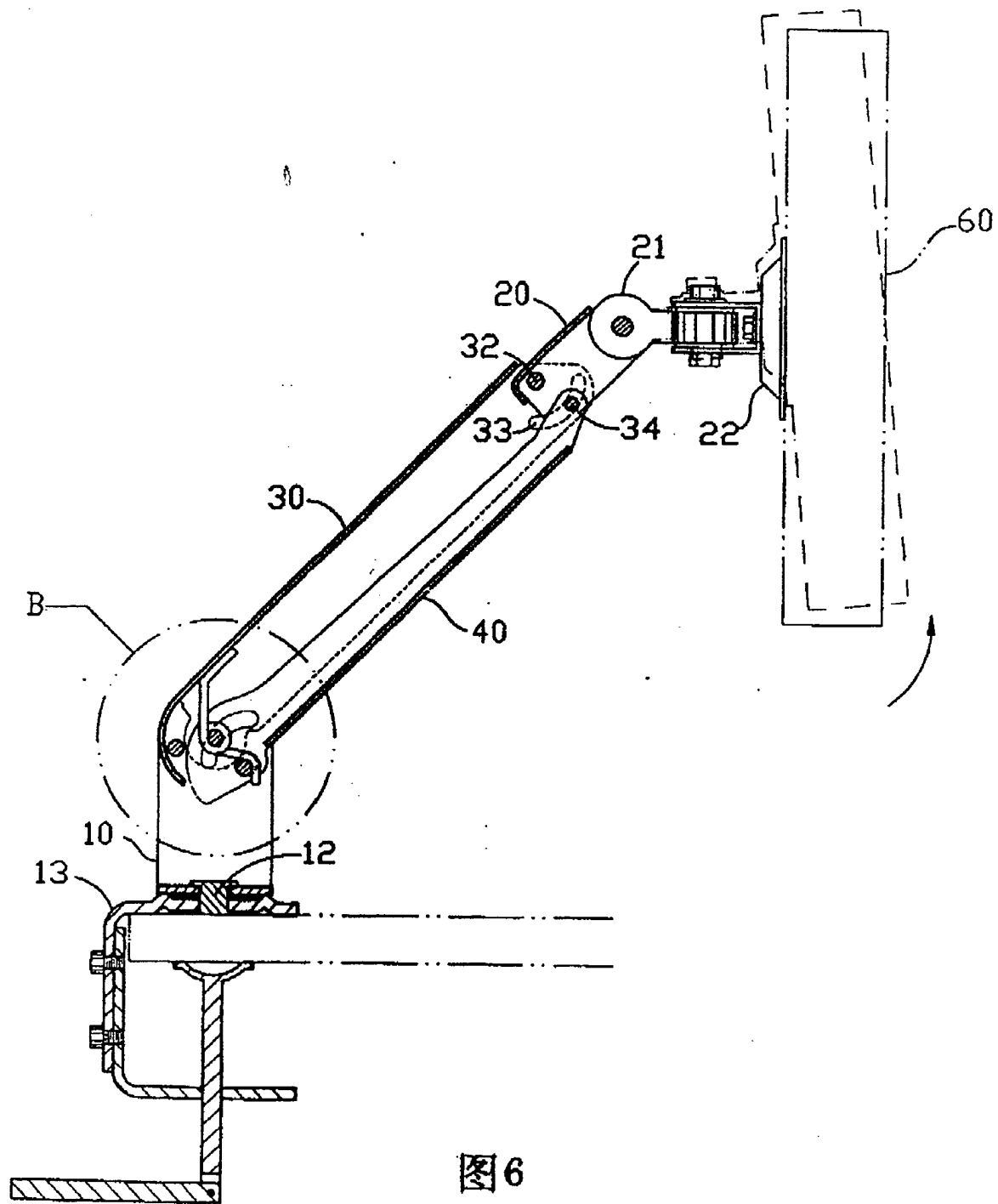


图6



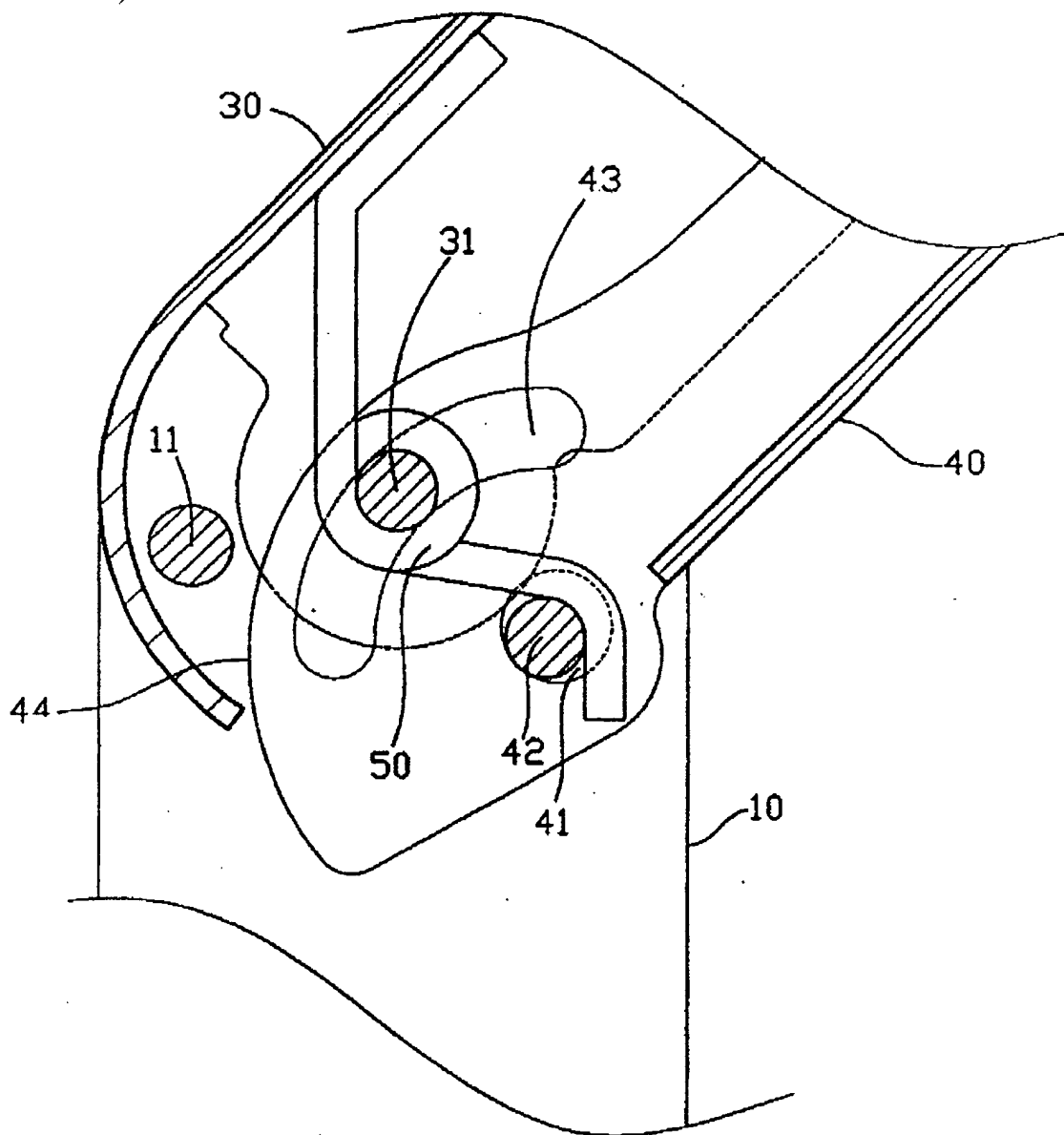


图7

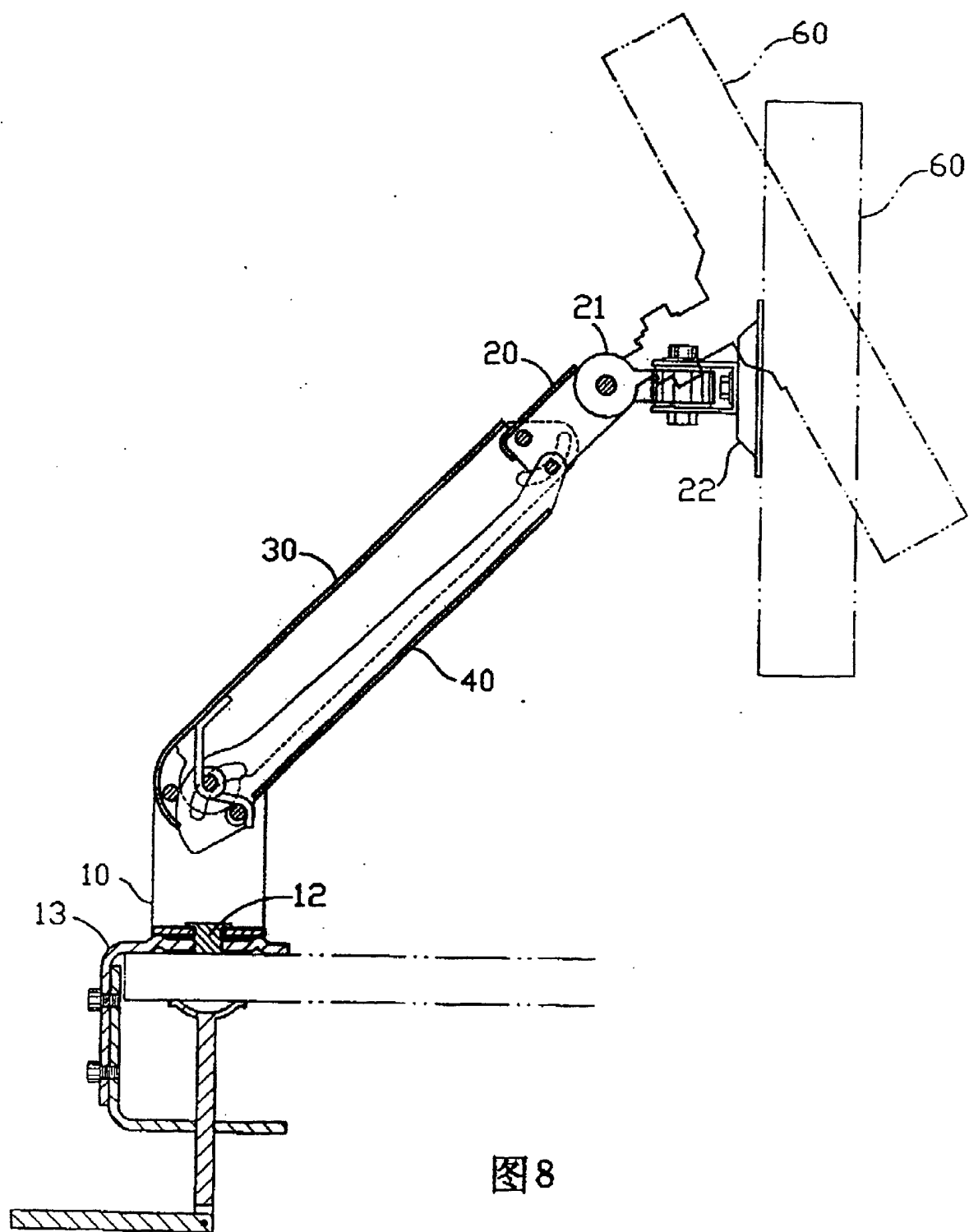


图 8

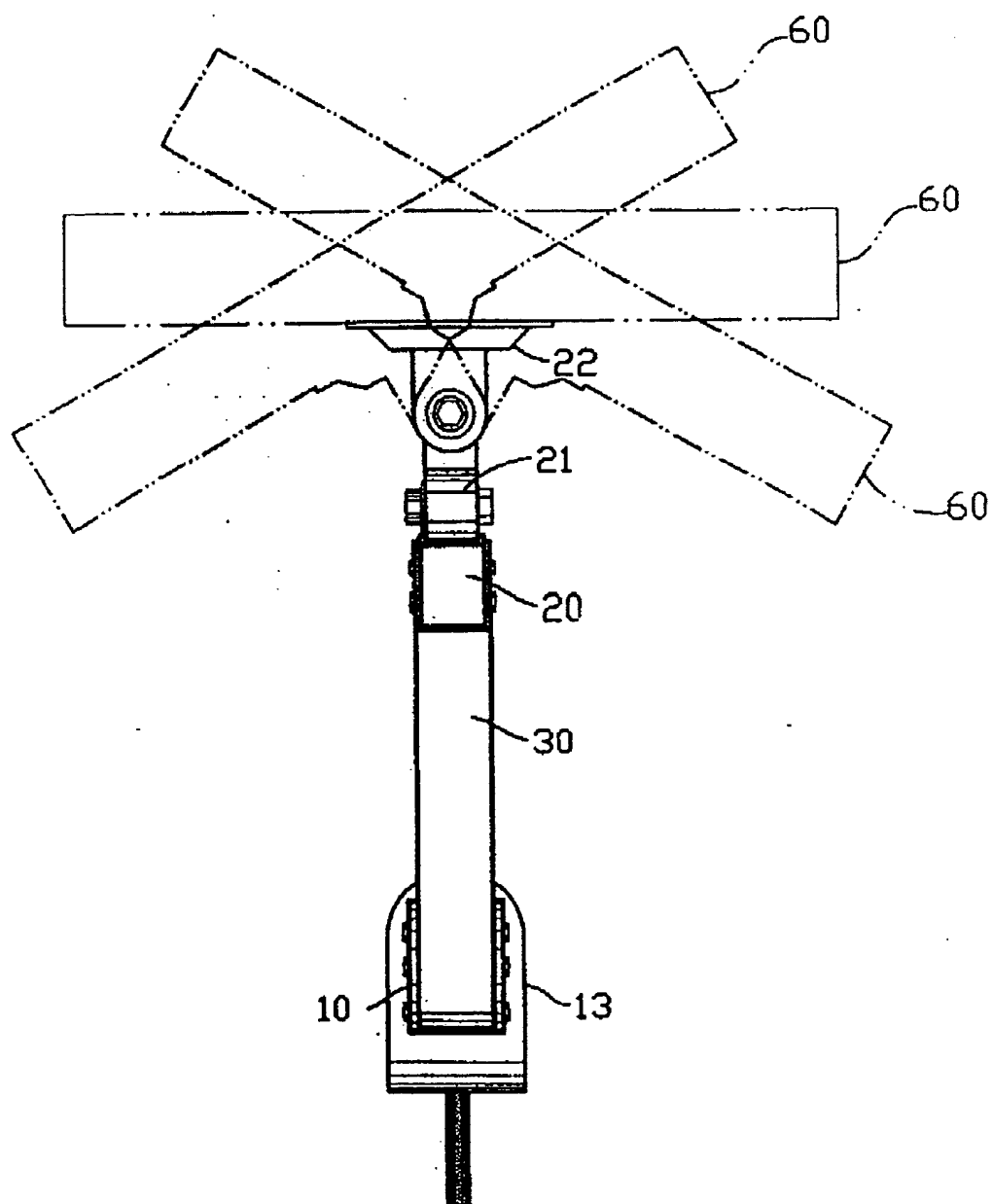


图9

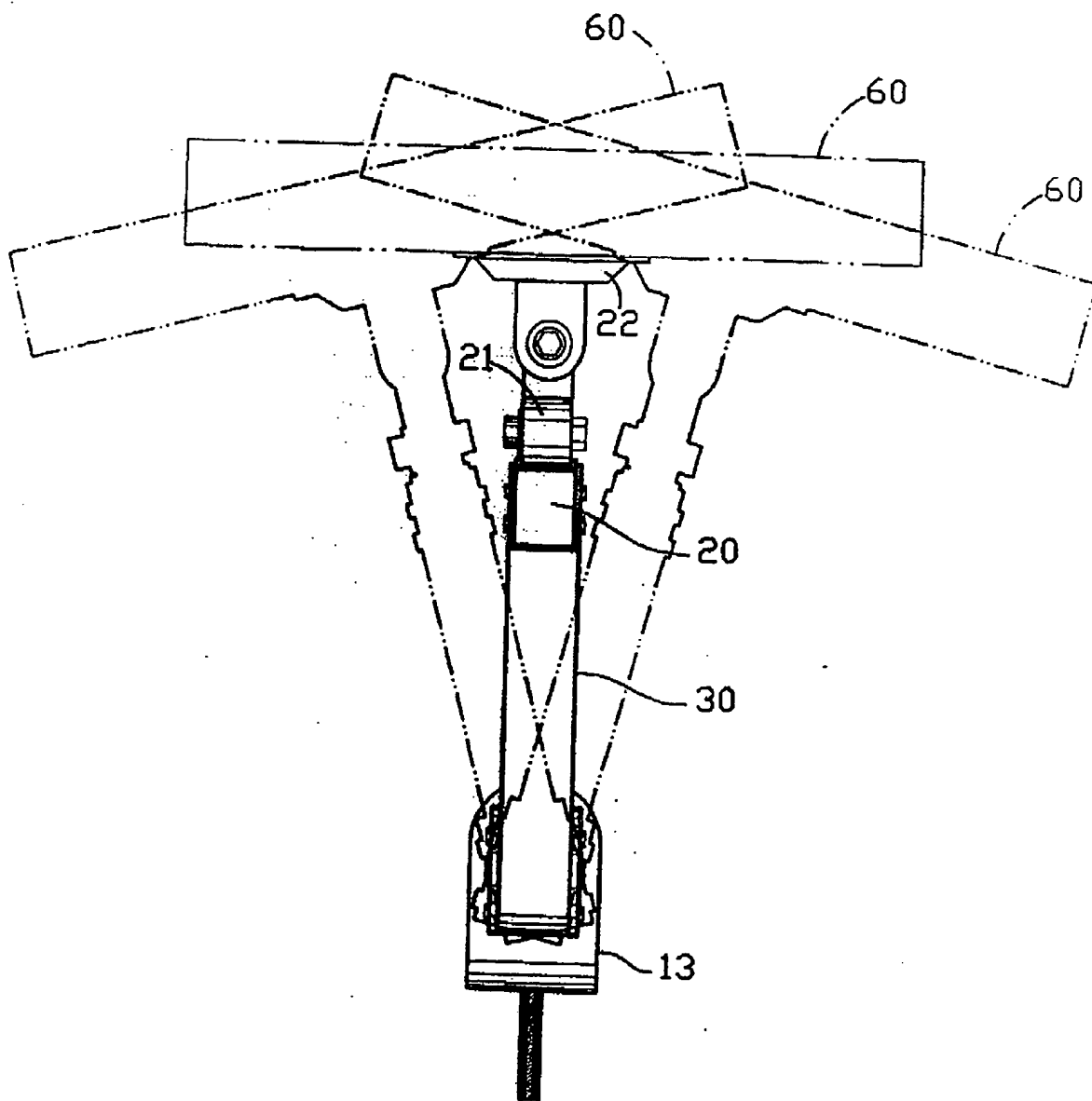


图10

Patent Law.

- ☐ Claim \_\_\_\_\_ does not possess practical applicability as provided by Article 22(4) of the Chinese Patent Law.
- ☒ Claim 1,4 is not in conformity with the provisions of Article 26(4) of the Chinese Patent Law.
- ☐ Claim \_\_\_\_\_ is not in conformity with the provisions of Article 31(1) of the Chinese Patent Law.
- ☒ Claim 1,2,4-7,9,10,13-26,29,30,32,33,35-41,43-51 is not in conformity with the provisions of Rule 20 of the Implementing Regulations of the Chinese Patent Law.
- ☐ Claim \_\_\_\_\_ is not in conformity with the provisions of Article 9 of the Chinese Patent Law.
- ☐ Claim \_\_\_\_\_ is not in conformity with the provisions of Rule 12(1) of the Implementing Regulations of the Chinese Patent Law.

The detailed reasoning for the above opinion is described in the text of this office action.

7. On the basis of the above opinion, the examiner holds that:

- ☐ The applicant should make amendments as required in the text of this office action.
- ☒ The applicant should provide reasons for that the above mentioned patent application can be granted patent right, and make amendments to the specification as described in the text of this office action; otherwise the patent right shall not be granted.
- ☐ The patent application does not possess any substantive contents for which patent right may be granted, if the applicant fails to provide reasons or the reasons provided are not sufficient, this application will be rejected.

8. The applicant's attention is drawn to the following matters:

- (1) In accordance with the provisions of Article 37 of the Chinese Patent Law, the applicant shall submit a response within four months from the date of receiving this office action. If the applicant fails to meet the time limit without any justified reason, the application shall be deemed to have been withdrawn.
- (2) The amendment made by the applicant shall be in conformity with the provisions of Article 33 of the Chinese Patent Law. The amendment shall be submitted in duplicate copies and in the format required by the relevant provisions of the Examination Guideline.
- (3) The applicant's response and/or amended documents shall be mailed or submitted to the Receiving Department of the Chinese Patent Office. Documents which are not mailed or submitted to the Receiving Department do not possess legal effect.
- (4) The applicant and/or his(its) agent shall not come to the Chinese Patent Office for interview with the examiner without an appointment.

9. The text of this office action consists of a total of 8 sheets, and is accompanied by the following annexes:

- ☒ A copy of the cited reference documents consisting of 1 sets and 16 sheets.

☐ The \_\_\_\_\_ Examination Department

The Seal of the Examiner: Zuping ZHANG

# The First Office Action

## Claim Rejections

1. The independent claim 1 is rejected under Article 22(2) of the Chinese Patent Law, which is quoted below, as lacking novelty over the reference 1 (CN2504675Y).

*Article 22(2) Novelty means that, before the date of filing, no identical invention or utility model has been publicly disclosed in publications in the country or abroad or has been publicly used or made known to the public by any other means in the country, nor has any other person filed previously with the Patent Administration Department Under the State Council an application which described the identical invention or utility model and was published after the said date of filing.*

The claim 1 is directed to a monitor. The reference 1 (CN2504675Y), which is filed with the SIPO in China by the other person on August 29, 2001 previous to the priority date of the present application and of which the date of patent is August 7, 2002, discloses a display with an improved support arm and specifically shows the following technical features (see page 2, line 29-page 4, paragraph 1 in the specification, and Figures 1-10): the display having a liquid crystal display main body to display a picture thereon, and a clamping base (equivalent to the base member in the claim 1) to support the liquid crystal display main body together with a support arm, the display comprising a cantilever (equivalent to the link member) having an upper end combined through a second shaft to a top member (equivalent to the main hinge) so as to form a rotary joint between the upper end and the top member by means of the second shaft and a lower end combined through a first shaft to two side arms of a bottom member (equivalent to the base hinge) so as to form a rotary joint between the lower end and the bottom member by means of the first shaft (equivalent to "rotatably combined to a main

hinge provided in the monitor main body and a base hinge provided in the base member, respectively" in the claim 1); a link (equivalent to the auxiliary link member) provided at lower ends of two side walls thereof with a pair of holes facing each other and combined through a fourth shaft having a diameter smaller than that of the holes to two side walls of the bottom member so as to form a rotary joint between the lower ends of the link and the bottom member by means of the fourth shaft, and also combined by similarly passing a third shaft through upper ends of the two side walls of the link to two side walls of the top member so as to form a rotary joint between the upper ends of the two side walls of the link and the top member (equivalent to "the auxiliary link member to connect the main and base hinges and disposed in parallel with the link member, the auxiliary member being eccentric with the main hinge and the base hinge"); a connecting base (equivalent to the main bracket) provided at the top member and supporting the liquid crystal display main body by means of the cantilever (i.e., the connecting base is interposed between the liquid crystal display main body and the cantilever); a orientating connector (equivalent to the pivot part) provided at the upper end of the top member, by which a pitch angle and an angle of yaw of the liquid crystal display main body are adjust (equivalent to "to pivot the monitor main body about the main bracket"). Therefore, the reference 1 discloses all of the technical features recited in the claim 1. Furthermore, the reference 1 and the claimed invention, which pertain to the same field, solve the same technical problem so as to achieve the same technical effect by use of the same technical scheme, so that the claim 1 does not comply with the novelty requirement of Article 22(2) of the Chinese Patent Law.

The claim 14 further defines the claim 1. However, the reference 1 also discloses the following technical features: a lower surface of the bottom member is combined to the clamping base, the lower ends of the two side walls of the link are provided with the pair of holes facing each other and combined through the fourth shaft having a diameter smaller than that of the holes to the two side walls of the bottom member (portions of

the two side walls of the bottom member near the clamping base are equivalent to the first and second supporting brackets recited in the claim 14 while portions of the two side walls of the bottom member combined through the fourth shaft to the link are equivalent to the first and second base hinge parts recited in the claim 14) so as to form the rotary joint between the lower ends of the link and the bottom member by means of the fourth shaft. Therefore, the claim 14 does not comply with the novelty requirement of Article 22(2) of the Chinese Patent Law in the case where the claim 1 which is referred to by the claim 14 lacks novelty.

The claim 31 further defines the claim 1. However, the reference 1 also discloses the following technical features: the lower surface of the bottom member (of which a portion housing the link is equivalent to the link member accommodating part recited in the claim 31) is combined to the clamping base, the lower ends of the two side walls of the link are provided with the pair of holes facing each other and combined through the fourth shaft having a diameter smaller than that of the holes to the two side walls of the bottom member. Therefore, the claim 31 does not comply with the novelty requirement of Article 22(2) of the Chinese Patent Law in the case where the claim 1 which is referred to by the claim 31 lacks novelty.

The claim 42 further defines the claim 1. However, the reference 1 also discloses the following technical features: the link is also combined by similarly passing the third shaft through the upper ends of the two side walls of the link to the two side walls of the top member so as to form the rotary joint between the upper ends of the two side walls of the link and the top member (i.e., the liquid crystal display main body is tilted in backward and forward directions to lay parallel to the link member. Therefore, the claim 42 does not comply with the novelty requirement of Article 22(2) of the Chinese Patent Law in the case where the claim 1 which is referred to by the claim 31 lacks novelty.

2. the claims 1 and 4 are rejected under Article 26(4) of the Chinese Patent Law,



which is quoted below, as not being supported by the specification.

*Article 26(4). The claims shall be supported by the description and shall state the extent of the patent protection asked for.*

The claim 1 recites “a main hinge provided in the monitor main body” which is not consistent with “a main hinge 70 of the main bracket 170 combined to the monitor main body 120” recorded in page 17, lines 13-14 in the specification and is not directly derived or generalized from the disclosure of the present application. Thus, the claim 1 does not comply with Article 26(4) of the Chinese Patent Law as not being supported by the specification. The applicant should amend the claim 1 accordingly.

The claim 1 recites “a base member to support the monitor main body” which is not consistent with the description that the base member is supported by the cooperation of the base hinge, the link member, the auxiliary link member, the main hinge, a main bracket, and the like disclosed in page 12, last line-page 24, 14 and is not directly derived or generalized from the disclosure of the present application. Thus, the claim 1 does not comply with Article 26(4) of the Chinese Patent Law as not being supported by the specification. The applicant should amend the claim 1 accordingly.

The claim 4 recites “(the pivot part comprises:) a first through hole formed through the main bracket; a second through hole formed through the monitor bracket, and having a protruding part to protrude from a center of the monitor bracket towards the main bracket” which is not consistent with “The first through hole 171 of the main bracket 170 has a circular shape, and the second through hole 181 of the monitor bracket 180 has a circular shape corresponding to the first through hole 171. The second through hole 181 is formed on a protruded part 183 to protrude from a center of the monitor bracket 180 toward the main bracket 170” recorded in page 13, last paragraph-page 14, line 1. Therefore, the claim 4 does not comply with Article 26(4) of

the Chinese Patent Law as not being supported by the specification. The applicant should amend the claim 4 accordingly.

3. The claims 1, 2, 4-7, 10, 14-24, 26, 29, 30, 32, 33, 35-38, 40-41, 43-51 are rejected under Rule 20(1) of the Implementing Regulation of the Chinese Patent Law, which is quoted below, as being unclear and not being concise.

*Rule 20 The claims shall define clearly and concisely the matter for which protection is sought in terms of the technical features of the invention or utility model.*

1. The claim 1 is unclearly defined since it is unclear how and where to fixed the main bracket. The applicant should amend the claim 1 to overcome the deficiency. Similarly, the claims 50, 51 have the same deficiency.

2. The claim 1 is unclearly defined because of "a pivot part to pivot the monitor main body about the main bracket". Firstly, the location of the pivot part and the connecting relationship of it with the other parts are unclear. Secondly, it is unclear how the pivot part pivots the monitor main body about the main bracket. The applicant should amend the claim 1 to overcome the deficiency, based on the disclosure of the specification.

3. The claim 1 is unclearly defined since it is unclear how the parts constituting the monitor cooperate. The claim 1 is directed towards a monitor including the parts movable with respect to each other, but based on the limitation in the claim 1, a person having ordinary skill in the art could not understand how the parts constituting the monitor cooperate, e.g., the titling angle of the monitor main body can be adjusted by the combination of the link member and the auxiliary link member with the main hinge, the rotation of the monitor main body in the horizontal plane can be controlled by the combination of the main bracket fixed to the monitor main body with the pivot part, and

the height of the monitor main body can be controlled by the combination of the link member with the base hinge. Therefore, the applicant should further define the claim 1 accordingly on the basis of the disclosure of the specification. Similarly, the claims 50 and 51 have the same deficiency.

4. The claim 2 is unclearly defined since it is unclear how and where the monitor bracket is fixed. The applicant should amend the claim 2 accordingly, based on the disclosure of the specification. Similarly, the claims 50 and 51 have the same deficiency.

5. The claim 4 is unclearly defined since the structural relationship of the washer with the other parts such as the rivet and the function of the washer are unclear, the applicant should amend the claim 4 accordingly, based on the disclosure of the specification.

6. The claim 4 is unclearly defined since "with a predetermined friction" has an indefinite meaning. Firstly, it is unclear between which parts the predetermined friction occurs. Secondly, it is unclear how to predetermine a friction and how to ensure that the friction is predetermined one. The applicant should amend the claim 4 on the basis of the disclosure of the specification.

7. The claim 4 is unclearly defined since the structural relationship of the cable through hole with the rivet is unclear. The applicant should amend the claim 4 on the basis of the disclosure of the specification.

8. The claim 5 is unclearly defined since "a pivoting angle restricting part to restrict a pivoting angle of the monitor bracket on the main bracket" has indefinite meaning. Firstly, "the monitor bracket on the main bracket" is unclearly expressed. The applicant could change it to "the monitor bracket pivoting with respect to the main bracket" based on the disclosure of the specification. Secondly, the location of the pivoting angle restricting part is unclear. The applicant should amend the claim 5 to overcome the deficiency on the basis of the disclosure of the specification.

9. The claim 6 is unclearly defined since "a pivot projection provided adjacent to

one of the first and second through holes” has uncertain meaning. Firstly, “provided adjacent to one of the first and second through holes” has indefinite meaning. Secondly, the location of the pivot projection is unclear. The applicant should amend the claim 5 on the basis of the disclosure of the specification.

11. The claim 6 is unclearly defined since the location of “a guiding slot” is unclear. The applicant should amend the claim 6 on the basis of the disclosure of the specification.

13. The claim 7 is unclearly defined since “a rear” has indefinite meaning. The applicant should explicitly recite how and with respect to what to define the “rear”.

15. The claim 10 is unclearly defined since the structure of the base bracket is unclear, nor is how “to install the base member onto an inclined plane”. The applicant should amend the claim 10 to overcome the deficiency on the basis of the disclosure of the specification.

16. The claim 10 is unclearly defined since “a rear” has indefinite meaning. The applicant should explicitly recite how and with respect to what to define the “rear”.

18. The claim 14 is unclearly defined, since “a pair of first and second supporting brackets” has indefinite meaning, i.e., it is unclear what “a pair of” modifies. Similarly, the claim 20 has the same deficiency

19. The claim 14 is unclearly defined due to “opposite sides”. The applicant could amend it to “opposite two sides”. Similarly, the claim 20 has the same deficiency.

20. The claim 15 is unclearly defined since “inside” has indefinite meaning. The applicant should explicitly recite how and with respect to what to define the “inside”.

21. The claim 15 is unclearly defined since the position and the structure of “a first pin accommodating part” are indefinite. The applicant should amend the claim 15 to overcome the deficiency based on the disclosure of the specification. At the same time, the applicant should amend “the first pin accommodating part” recited in the claim 32 accordingly.

22. The claim 16 is unclearly defined since the position of "a spring supporting part" is indefinite. The applicant should amend the claim 16 to overcome the deficiency based on the disclosure of the specification.

24. The claim 17 is unclearly defined since "a second side" is indefinite. The applicant does not define a first side in the claim which is depended from by the claim 17 so that the second side in the claim 17 has uncertain meaning. The applicant should explicitly recite how and with respect to what to define the second side, or amend the dependency of the claim 17. Similarly, the claim 19 also has the same deficiency.

25. The claim 17 is unclearly defined since "inside" has indefinite meaning. The applicant should explicitly recite how and with respect to what to define the "inside".

26. The claim 18 is unclearly defined since the location and structure of the rotating angle restricting part are unclear. The applicant should amend the claim 18 to overcome the deficiency on the basis of the disclosure of the specification.

28. The claim 19 is unclearly defined since "the second pin accommodating part" and "the second pin supporting part" have indefinite meaning. The applicant does not define them in the claims which are referred to by the claim 19, so that the applicant should explicitly recite the positions and structures of "the second pin accommodating part" and "the second pin supporting part", respectively, or amend the dependency of the claim 19.

30. The claim 21 is unclearly defined since the location and structure of the third supporting bracket are unclear. The applicant should amend the claim 21 to overcome the deficiency on the basis of the disclosure of the specification.

31. The claim 21 is unclearly defined since "therein" has indefinite meaning. The applicant should explicitly recite what it means. Similarly, the claim 22 has the same deficiency.

33. The claim 22 is unclearly defined since "between the opposite sides of the upper end of the link member" is unclearly. The applicant should amend the claim 22 to

overcome the deficiency based on the disclosure of the specification.

34. The claim 23 is unclearly defined since the location and the structure of the tilting angle restricting part are unclear. The applicant should amend the claim 23 to overcome the deficiency based on the disclosure of the specification.

35. The claim 24 is unclearly defined since "an arc cutting part formed on the fourth supporting bracket adjacent to the third frictional spring" has uncertain meaning. Firstly, the applicant does not define the third frictional spring in the claim which is referred to by the claim 24, so that the applicant should explicitly recite the location of the third frictional spring, or amend the dependency of the claim 24.

36. The claim 24 is unclearly defined since the position of the fourth hinge pin is unclear. The applicant does not define the fourth hinge pin in the claim which is referred to by the claim 24, so that the applicant should explicitly recite the location of the fourth hinge pin, or amend the dependency of the claim 24.

37. The claim 24 is unclearly defined since "opposite ends" in "engaged with opposite ends of the arc cutting part" has indefinite meaning. The applicant should explicitly recite the meaning of the "opposite ends".

40. The claim 26 is unclearly defined since "opposite ends" has indefinite meaning. The applicant should explicitly recite the meaning of the "opposite ends".

42. The claim 29 is unclearly defined since "the pivoting angle of the pivot projection is restricted within the guiding slot" is unclearly expressed. The applicant should amend it so that the pivoting angle of the pivot projection is restricted within a specific range or the pivoting angle of the pivot projection is restricted by use of the guiding slot.

43. The claim 30 is unclearly defined since the structures and functions of the pivot projection and the guide slot are indefinite. The applicant should amend the claim 30 to overcome the deficiency based on the disclosure of the specification.

44. The claim 33 is unclearly defined since it is unclear who has "a predetermined

friction" and "the predetermined friction" is indefinite.

47. The claim 37 is unclearly defined since the location of the auxiliary members is unclear. The applicant should amend the claim 37 to overcome the deficiency based on the disclosure of the specification. Similarly, the claims 38 and 41 have the same deficiency.

48. The claim 38 is unclearly defined since "the second and third frictional springs are rotated about the third and fourth hinge pins, preventing the auxiliary members and the second link supporting part from rotating" does not define the claim by clear structural limitation. A person having ordinary skill in the art could not know what structure achieve the effect "the second and third frictional springs are rotated about the third and fourth hinge pins, preventing the auxiliary members and the second link supporting part from rotating". Therefore, the applicant should recite the structure that can achieve the effect based on the disclosure of the specification.

50. The claim 40 is unclearly defined since it is unclear how to determine a range of the tilting angle by a design of the arc cutting part and the projection of the tilting restriction washer. The applicant should recite how to design the arc cutting part and the projection of the tilting restriction washer.

51. The claim 41 is unclearly defined since "transmit" in "the auxiliary members transmit a rotating motion of the link member against the base member to a tilting motion of the monitor main body" has indefinite meaning. Similarly, the "transmit" in the claim 43 also has the same deficiency.

52. The claim 44 is unclearly defined since "a tilt of the monitor main body against the link member is interlocked with a rotation of the link member against the base member" is not defined by clear structural limitation. The applicant should explicitly recite the structure that achieves "interlocked".

53. The claim 45 is unclearly defined since the locations and functions of the arm stand and fourth combining hole are unclear, nor are how the arm stand is provided with

the monitor supporting part and the function of the monitor supporting part.

54. The claim 46 is unclearly defined since the location of the third combining hole is unclear. The applicant should amend the claim 46 to overcome the deficiency based on the disclosure of the specification, or amend the dependency of the claim 46.

55. The claim 47 is unclearly defined since the locations of the first and second hinge parts are unclear, nor is how at least one of the first and second hinge parts is provided with a torsion spring. The applicant should amend the claim 47 to overcome the deficiency based on the disclosure of the specification.

56. The claim 48 is unclearly defined since the location and structure of a tilting angle restricting part are unclear, nor is how at least one of the first and second main hinge parts is provided with a tilting angle restricting part. The applicant should amend the claim 48 to overcome the deficiency based on the disclosure of the specification.

57. The claim 49 is unclearly defined since "the monitor main body is controlled in a tilt position, planar rotation, and height position while maintaining the tilt position regardless of the controlled height position" is not defined by clear structural limitation. The applicant should explicitly recite the structure that achieves the effect based on the disclosure of the specification.

58. The claim 51 is unclearly defined since the structure of the base bracket is unclear, nor is how to install the base member onto an inclined plane. The applicant should amend the claim 51 to overcome the deficiency based on the disclosure of the specification.

59. The claim 51 is not concisely defined since the claim 51 and claim 50 are substantially identical to each other. The claim 51 includes the content recited in the claim 50, so that the claim 51 should be drafted so as to be dependent upon the claim 50.

Due to the above reasons, the claims 1, 2, 4-7, 10, 14-24, 26, 29, 30, 32, 33, 35-38, 40-41, 43-51 do not comply with Rule 20(1) of the Implementing Regulations of the



Chinese Patent Law. The applicant should amend the content in the summary of the invention in accordance with the amendments to the claims.

### **Conclusions**

Concerning the above, the present application in the current version can not be granted patent right. The applicant shall amend the application documents to overcome the above-mentioned defects based on the above examination opinions within the time limit prescribed by the notification. At the same time, please be noted that the amendment shall be in conformity with Article 33 of the Chinese Patent Law and that it shall not go beyond the initial scope of the claims and specification. In addition, any voluntary amendment may make the documents to be submitted unacceptable.

*Article 33. An applicant may amend his or its application for a patent, but the amendment to the application for a patent for invention or utility model may not go beyond the scope of the disclosure contained in the initial description and claims, and the amendment to the application for a patent for design may not go beyond the scope of the disclosure as shown in the initial drawings or photographs.*

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